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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,451	02/10/2004	Nicholas DeMarco	012365-9011-01	9421
23409	7590	07/18/2006	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP			THERKORN, ERNEST G	
100 E WISCONSIN AVENUE			ART UNIT	
MILWAUKEE, WI 53202			PAPER NUMBER	

1723

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/775,451

Applicant(s)

DEMARCO, NICHOLAS

Examiner

Ernest G. Therkorn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 8,11-21 and 29-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10 and 22-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-10, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526). At best, the claims differ from either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in reciting use of a fused plug. Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to “meld their adjacent surfaces together” for the obvious purpose of preventing leaking. Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks. It would have been obvious to spin weld in either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) because Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to “meld their adjacent surfaces together” for the obvious purpose of

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preventing leaking and Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks.

Claims 7 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) as applied to claims 1-7, 9-10, and 22-28 above, and further in view of Goss (U.S. Patent No. 6,454,891). At best, the claims differ from either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) in reciting use of a bore. Goss (U.S. Patent No. 6,454,891) (Abstract, lines 1-14) discloses that a bore allows attachment to a drive means for spin welding. It would have been obvious to have a bore in either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) because Goss (U.S. Patent No. 6,454,891) (Abstract, lines 1-14) discloses that a bore allows attachment to a drive means for spin welding.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) as applied to claims 1-7, 9-10, and 22-28 above, and further in view of Hou (U.S. Patent No. 5,089,654). At best, the claim differs from either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) in reciting use of a cover. Hou (U.S. Patent No.

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5,089,654) (column 45, lines 3-5) discloses that use of a protective cap (cover) protects the inlet and outlet. It would have been obvious to use a cover in either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) because Hou (U.S. Patent No. 5,089,654) (column 45, lines 3-5) discloses that use of a protective cap (cover) protects the inlet and outlet.

Claims 1-7, 9-10, and 22-28 rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hou (U.S. Patent No. 5,089,654). The claims are considered to read on Hou (U.S. Patent No. 5,089,654). However, if a difference exists between the claims and Hou (U.S. Patent No. 5,089,654), it would reside in optimizing the elements of Hou (U.S. Patent No. 5,089,654). It would have been obvious to optimize the elements of Hou (U.S. Patent No. 5,089,654) to enhance separation.

Claims 1-7, 9-10, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou (U.S. Patent No. 5,089,654) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526). At best, the claims differ from Hou (U.S. Patent No. 5,089,654) in reciting use of a fused plug. Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to "meld their adjacent surfaces together" for the obvious purpose of preventing leaking. Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks. It would have been obvious to spin weld in Hou (U.S. Patent No. 5,089,654) because Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin

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welding a cap to the cartridge to “meld their adjacent surfaces together” for the obvious purpose of preventing leaking and Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks.

Claims 7 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Hou (U.S. Patent No. 5,089,654) alone or Hou (U.S. Patent No. 5,089,654) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) as applied to claims 1-7, 9-10, and 22-28 above, and further in view of Goss (U.S. Patent No. 6,454,891). At best, the claims differ from either Hou (U.S. Patent No. 5,089,654) alone or Hou (U.S. Patent No. 5,089,654) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) in reciting use of a bore. Goss (U.S. Patent No. 6,454,891) (Abstract, lines 1-14) discloses that a bore allows attachment to a drive means for spin welding. It would have been obvious to have a bore in either Hou (U.S. Patent No. 5,089,654) alone or Hou (U.S. Patent No. 5,089,654) in view of Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526) because Goss (U.S. Patent No. 6,454,891) (Abstract, lines 1-14) discloses that a bore allows attachment to a drive means for spin welding.

The remarks urge that there is no motivation to combine Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) with Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526). However, Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to “meld their adjacent surfaces together” for the obvious purpose of preventing leaking. Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes

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leaks. Motivation exists to spin weld in either Yamada (U.S. Patent No. 5,693,223) or Nakaso (U.S. Patent No. 5,360,544) because Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to "meld their adjacent surfaces together" for the obvious purpose of preventing leaking and Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks.

The remarks urge Hou (U.S. Patent No. 5,089,654) does not suggest a fusing. However, Hou (U.S. Patent No. 5,089,654) (column 45, lines 3-4) discloses welding. Fusing is considered to read on welding.

The remarks urge that there is no motivation to combine Hou (U.S. Patent No. 5,089,654) with Lacy (U.S. Patent No. 6,280,619) and Fritze (U.S. Patent No. 6,953,526). However, Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to "meld their adjacent surfaces together" for the obvious purpose of preventing leaking. Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks. Motivation exists to spin weld in Hou (U.S. Patent No. 5,089,654) because Lacy (U.S. Patent No. 6,280,619) (column 3, lines 47-57) discloses spin welding a cap to the cartridge to "meld their adjacent surfaces together" for the obvious purpose of preventing leaking and Fritze (U.S. Patent No. 6,953,526) (column 1, lines 52-56) confirms spin welding minimizes leaks.

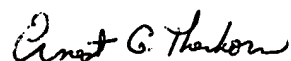
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1723**

EGT  
July 12, 2006